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CENTAURIUM TENUIFLORUM (GENTIANACEAE) NEW TO OKLAHOMA AND NOTES ON *CENTAURIUM TEXENSE* IN MEXICO

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ABSTRACT

Centaurium tenuiflorum is reported for the first time as occurring in Oklahoma. *Centaurium texense* is reported from Monterrey, Nuevo Leon, Mexico.
Key Words: Gentianaceae, *Centaurium,* Oklahoma, United States, Nuevo León, Mexico.

Based on the collection of the following specimens, we report *Centaurium tenuiflorum* (Hoffmsgg. & Link.) Fritzch as new to the Oklahoma flora.

USA. Oklahoma. Bryan Co.: Red River floodplain, 100 meters W of jct. of Oklahoma Hwy 75 and the Red River, 19 Jul 2011, *J.R. Singhurst & M.White 18690* (BAYLU); same location, 1 Jul 2011, *M. White s.n.* (BAYLU).

Centaurium tenuiflorum has been reported under the name *Centaurium muehlenbergii* (Griseb.) W. Wright ex Piper in Texas, Louisiana, and Mississippi by Holmes and Wivagg (1996). Use of this name was based upon Hickman (1993), where *C. tenuiflorum* is listed as a synonym of *C. muehlenbergii*. However, *C. tenuiflorum* is currently recognized as distinct from *C. muehlenbergii* (Pringle 2010). Additionally, if the two centauriums are considered conspecific (as published in Hickman 1993), the basionym of *C. tenuiflorum* (*Erythraea tenuiflora* Hoffmsgg. & Link, Fl. Portug. 1, 354, t. 67. 1809) has priority. The basionym of *C. muehlenbergii* is *Erythraea muehlenbergii* Griseb., Gen. Sp. Gent. 146. 1838. Taxonomic disagreements are not unique to North American centauriums as dispute in European species status has occurred periodically since Linnaeus first united centauries with the gentians in 1753 (see nomenclature enumerated and listed in Gilmour 1937).

Centaurium tenuiflorum is native to western and southern Europe. It has been introduced and naturalized in California and Oregon in addition to the states mentioned above. The species tends to be "weedy," occurring in pastures, waste places, disturbed areas, and roadsides. It is often confused with *C. texense* (Griseb.) Fern. but may be distinguished by its habitat preference (weedy areas), robust size (generally 30 cm or more tall), flat-topped corymb, and more or less sessile flowers. *Centaurium texense* normally occurs on eroded limestone, has a more open and paniculate inflorescence, is normally less than 20 cm tall (occasionally up to 30 cm), and has pedicels about the same length as the calyces.

Notes on *Centaurium texense* in Mexico.

Centaurium texense (Griseb.) Fern. is distributed from southeast Kansas and southwest Missouri, southward through Arkansas and Oklahoma to central Texas (Correll & Johnston 1970; Fernald 1950; USDA, NRCS 2011). In Texas, Turner et. al. (2003) mapped the species south to Bexar County. Since there is no mention in the above references (or distributional documentation by others, e.g., Steyermark 1963; McGregor & Barkley 1977) of the species occurring elsewhere, it is reasonable to conclude that the species is endemic to the USA, although this is not directly stated. Study in the U.S. National Herbarium in July 2003 by W.C. Holmes resulted in the discovery of a specimen of *C. texense* from Mexico. This is the first report of the species in that country and establishes the non-endemic status of the species in the USA.

MEXICO. Nuevo León. Monterrey, 26 Jul 1926, *G.L. Fisher 228* (US). The specimen was independently annotated as *Centaurium texense* (Griseb.) Fern. in 1975 by C. Rose Broome and R.L. Wilbur.

George L. Fisher (1868-1953) was a professional collector who sold and exchanged botanical specimens, making numerous collecting trips into Mexico. The collection from Monterrey is out of range but collected by a reputable (competent) botanist. In connection with the U.S. National Herbarium (US), Fisher ran the American Botanical Exchange (described in Vasey 1888) from his Texas residence in Houston. A brief obituary is in Shinners (1954), as well as an unattributed note in Taxon 3(8): 247 correcting Fisher's date of birth.

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